THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JASON B.E. JULYAN
and STEPHEN J. HUBBINS

Appeal No. 97-3075
Application 08/201,846[1]

ON BRIEF

Before KRASS, MARTIN, and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 4 through 8, 13 through 20 and 25 through 28. Claims 2, 3, 9 through 12, 21 through 24, 29 through 38 and 41

[1] Application for patent filed February 25, 1994.

through 44 have been canceled. Claims 39 and 40 stand allowed.

The invention pertains to a method and apparatus for operating upon a received digital data signal, best understood from an analysis of representative independent claim 1, reproduced as follows:

1. A method of receiving an input digital data signal representing a sequence of values, comprising:

taking samples of the waveform of the input digital data signal a plurality of times during each of the values,

storing in a known order in a sequence of latches the plurality of the samples corresponding to each of the values as they are received,

deriving a digital phase signal representing the difference in phase between the input digital data signal and a reference signal, and

decoding the digital phase signal, detecting a location within the sequence of latches represented by the decoded digital phase signal corresponding to an edge in the waveform of the input digital data signal, and selecting one of the samples of the waveform of the input digital data signal from the sequence of latches remote from the detected edges in the waveform of the input digital data signal.

No references are cited by the examiner.

Claims 1, 4 through 8, 13 through 20 and 25 through 28 stand rejected under 35 U.S.C. § 112, first and second paragraphs.

Reference is made to the briefs and answers[2] for the respective positions of appellants and the examiner.

OPINION

At the outset, we note, in passing, that claims 6 through 8 are in improper form as 37 CFR § 1.75 states that "[a] multiple dependent claim shall not serve as a basis for any other multiple dependent claim."

The examiner rejects the claims under 35 U.S.C. § 112, first paragraph, but does not clearly indicate whether the rejection is one of inadequate written description or nonenablement.

The first paragraph of 35 U.S.C. § 112 contains three separate and distinct requirements for sufficiency of disclosure, i.e., the written description, enablement and best mode requirements. See In re Barker, 559 F.2d 588, 591, 194

[2] The examiner's response to the reply brief, Paper No. 17, is considered a supplemental answer.

USPQ 470, 472 (CCPA 1977); In re Gay, 309 F.2d 769, 772, 135 USPQ 311, 315 (CCPA 1962). While the examiner has not maintained a clear distinction among these requirements, at times referring to "support" [e.g., principal answer-bottom of page 8] and, at other times, referring to "inadequate to teach making..." [principal answer-page 6], we hold the disclosure to contain an adequate written description and to be enabling. At times, the examiner's explanation of the rejection appears to reflect a problem with the claim language being misdescriptive.

The claims were rejected in the final rejection based on the specification "failing to provide a teaching for detecting a location within the sequence of latches represented by the decoded digital phase signal." The examiner appears to think that the claim language requires the "sequence of latches" to be "represented by the decoded digital phase signal." It does not. Perhaps the claim language could have been a little clearer, but "represented by the decoded digital phase signal" modifies "location" and not "sequence of latches." As far as support for this claim recitation, appellants point out many

sections of the specification which provide support. For example, page 2, lines 12-16, recites

> ...and decoding the digital phase signal and accessing the location at the address of the memory represented by the digital phase signal so as to select samples remote from edges in the waveform of the input data signal.

The examiner argues (principal answer-page 5) that this section of the specification "states **absolutely nothing** regarding detecting a location within the sequence of latches represented by the **decoded digital phase signal.**" The examiner is in error. Clearly, the specification discloses the decoding of a digital phase signal. The specification then says that the location at the address of the memory represented by the digital phase signal is accessed. Therefore, it is not the sequence of latches which is represented by the decoded digital phase signal, which is how the examiner apparently is construing the claim, but, rather, it is the *location* of a waveform edge within the sequence of latches which is represented by the decoded digital phase signal.

For some reason, both the examiner and appellants then go off on a tangent in discussing whether the disclosed

multiplexer (element 9 in Figure 1) can be a decoder, with the examiner concluding that it cannot. It is true that the multiplexer is not a "decoder," per se. However, the multiplexer is part of a combination of elements shown in Figure 1 which comprise the "decoding" and "selecting" means. As explained by appellants, at the bottom of page 3 of the first reply brief (Paper No. 15), the multiplexer 9 performs the selecting function, passing on the selected samples from register 5 to the elastic buffer 10, under the control of a signal passed to the multiplexer from frame selector 24, i.e., multiplexer 9 appears to act as a gate. This selecting function is clearly subsequent to the "decoding" of the digital phase signal performed by phase detector 7.

The examiner takes the position that since the claims call for decoding the digital phase signal and then detecting the location... and selecting ... and Figure 1 shows the multiplexer 9, which is supposed to be performing the decoding, downstream of the phase detector, which is supposed to be performing the detecting, something is amiss. We think the examiner misconstrues the claimed invention as it relates to the disclosure. While the claims are not in the finest

form, it does appear clear that the multiplexer 9 is not a decoder, per se, but rather, part of the entire system which "decodes and selects." The multiplexer's main function is in the "selecting," which is clearly subsequent to the "decoding" performed by detector 7. Accordingly, we will not sustain the rejection of the claims under 35 U.S.C. § 112, first paragraph, because we find no reasonable basis for the examiner's complaints regarding any inadequate written description or enablement problems under 35 U.S.C. § 112, first paragraph.

With regard to the rejection based on the second paragraph of 35 U.S.C. § 112, the examiner makes two points.

First, the examiner contends that there is no antecedent basis for "the sequence of latches represented by the decoded digital phase signal." We disagree with the examiner's assessment. Claim 1, for example, sets forth that a digital phase signal is derived. Then, that digital phase signal is decoded and a location represented by the decoded digital phase signal is detected within the sequence of latches. Thus, there appears to be an adequate antecedent basis for the terms of the claims cited by the examiner. The examiner's

problem might stem from the examiner's interpretation of the claim to require that the sequence of latches, rather than a location therein, be actually represented by the decoded digital phase signal. Accordingly, we will not sustain this portion of the examiner's rejection based on 35 U.S.C. § 112, second paragraph.

However, we reach a different result, and will sustain the portion of the rejection under 35 U.S.C. § 112, second paragraph, wherein the examiner indicates that there is no proper antecedent basis for "the detected edges" in the penultimate lines of independent claims 1 and 16. While the problem appears to be an easy one to correct, technically, the examiner is correct in that there is no proper antecedent basis for "the detected edges" because the claims previously call for only a single "edge." We do not agree with appellants that sequencing "values" implies plural edges. One might have a sequence of values and still be interested in only one edge of a waveform.

We have sustained the rejection of the claims under 35 U.S.C. § 112, second paragraph, but we have not sustained the

rejection of the claims under 35 U.S.C. § 112, first paragraph. Accordingly, the examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Errol A. Krass Administrative Patent Judge	)	
John C. Martin Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
Anita Pellman Gross Administrative Patent Judge	)	

tdc

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